Gateway

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The ARRL Packet-Radio Newsletter

LATIN AMERICAN TRAFFIC CONNECTION

Chuck, TIØPAQ, in San Jose, Costa Rica, is active on the 30-meter packet-radio net and can handle traffic for much of Central and South America. According to a message from Chuck, "Please send your health and welfare traffic. We can get it into the Nicaragua area, not easily, but there is a way to send traffic to and from that area. We can refile it with the Red Cross locally and get it there, no problem."

from Jim Parsons, K5ROV

PACKET RADIO IN HUNGARY

According to a report from Bela, HA5DI, Hungarian hams are packet radioactive with two digipeaters, five TheNet nodes and four WA7MBL PBBSs all operating on 144.675 MHz.

Kantronics Firmware Update RELEASED

Kantronics has introduced several enhancements to its TNCs with its recently announced Version 2.85 firmware. Many of the features included are a direct result of users calling with suggestions for improvements to the product.

Some of the new features include the ability to stay connected to a distant KA-NODE when the far-end station disconnects This must be established by the end-user when he builds his KA-NODE link from one node to the next or to the other end-user. This allows the user to establish a path to a distant city, talk to a station there and remain connected to the distant city after that station disconnects. This can be useful for making multiple connections to a remote location.

Another feature is the ability to automatically switch a user into your PBBS when you are not available, thus eliminating the need for the user to issue a new connect to your PBBS. All units except the KPC-1 now feature a mail-waiting indicator. Anytime there is mail in your PBBS for you and you are not connected to someone, your STA light will blink to indicate that you have mail.

For KAM owners, WEFAX tuning has been simplified by using the bar-graph tuning indicator with mark and space tones tones set to 2300 and 1500 Hz.

Other enhancements permit PBBS operators to enable the "BBSMSGS" function which eliminates connect request messages and stream-switching characters from connect messages. TCP/IP users are now able to operate the KISS mode on either port by setting the "MAXUSERS" parameter to 0/n or n/0 in either the KPC-4 or KAM.

The KA-NODE now can be turned into a "wild card" node which allows an end-user to establish more than one connection to the KA-NODE. The KA-NODE timeout timer, "KNTIMER," is now user-selectable.

The list format from the PBBS has been modified to be more like the WØRLI and WA7MBL versions. Each message is listed on a separate line with its "SIZE," "TO," "FROM," "DATE," "TIME," and "SUBJECT." Additionally, a user can now use the "LM" (List Mine), "RM" (Read Mine) and "KM" (Kill Mine) commands.

For information concerning pricing of the Version 2.85 firmware upgrade, telephone Kantronics at 913-842-7745.

from CompuServe's HamNet

MACINTOSH TCP/IP SOFTWARE AVAILABILITY

The latest Macintosh release of the KA9Q TCP/IP software package may now be downloaded from CompuServe's HamNet in packed StuffIt format. The file is over 420 kbytes in length and will take nearly an hour and a half to download at 2400 bauds. Note that the KA9Q Internet software package is free for Amateur Radio use, but is not in the public domain. Those interested in commercial use should contact Phil Karn, KA9Q, for licensing information.

AA4RE MAILBOX SOFTWARE AVAILABLE

Version 2.2 of "BB," the PBBS "mailbox" program written by Roy Engehausen, AA4RE, has just become available. This IBM PC/XT/AT/PS2 (and clone) program features multiple ports and multiple connects per port. New features include hierarchical addressing and support for the AEA PK-87 and PK-232 TNCs.

The advantage of BB over other PBBS software is that you do not need to run DESQview or DoubleDOS and have multiple copies running to allow multiple users to connect, as do the other systems because BB contains its own internal multitasking executive. Each additional user only requires 12 kbytes of memory and BB does not limit you to one user per TNC. You could have several users connected to each TNC and still forward mail at the same time.

BB also includes a built-in text editor so you can edit messages and forward files without interrupting any users or taking the PBBS down. Windowing provides you with a monitor window, a connect window and an operator window.

The program requires a "host mode" TNC. Currently supported are the TNC 1 (and clones) with WA8DED's host-mode firmware installed, TNC 2 (and clones) with WA8DED's or NORD><LINK's firmware installed, the AEA PK-87 and PK-232, the DRSI PC*PA and the Pac-Comm PC-110 and 120.

AA4RE has also released MBBIOS Version 3.2 (MBBIOS is the communication port driver used by the WA7MBL and WØRLI PBBS systems). There are only a few new features for the average user, so if your are happy with your current version, do not change it.

AA4RE software may be downloaded from CompuServe's HamNet or the WA6RDH BBS at 916-678-1535 (300, 1200 or 2400 baud with no parity, 8 character bits and 1 stop bit). Or you can obtain these programs by mailing two formatted diskettes for the BB program, documentation and MBBIOS 3.2 or three formatted diskettes for the BB source code and MBIOS 3.2 with a diskette mailer, mailing label and return postage to either Frank McPherson, KB7TV, 16410 South 46th Pl, Phoenix, AZ 85044 or Gary Mitchell, WB9TPG, 220 East Eagle St, Versailles, KY 40383 (WB9TPG @ WB9TPG.KY.USA.NA). WB9TPG can handle standard 5-1/4-inch 360-kbyte diskettes, while KB7TV can handle either 5-1/4-inch or 3-1/2-inch, single- or double-density diskettes (360 kbyte, 1.2 Mbyte, 720 kbyte, 1.44 Mbyte). Please do not send diskettes to AA4RE.

from Roy Engehausen, AA4RE,
and Gary Mitchell, WB9TPG

AN NTS SUCCESS STORY

On November 5, I received a phone call from a young lady asking if I could send a message to her brother, an active-duty sailor in the US Navy stationed in the Philippines. The message concerned a family member that passed away. I said I would try and sent an NTS-formatted message to 96654 @ NTSCA assuming that someone in California would know how to send traffic to FPO 96654-1218, Cubi Point, Philippines.

I sent the message to the NC8Q PBBS @ 1638z then "auto-magically" NC8Q PBBS auto-forwarded it to the N8GTC PBBS on 221.11 MHz, then N8GTC auto-forwarded to the W8AKF-10 PBBS, then W8AKF-10 to W8AKF-1, then to W6CUS-1 (Red Cross Headquarters, California) and finally to Red Cross Subic Bay Philippines at 1945Z.

It took only three hours and seven minutes to forward the message to the Philippines. Wow! I wish to send thanks, accolades and commendations to all who participate in the NTS and Packet-Radio Bulletin Board Systems.

by Chuck Gelm, NC8Q @ NC8Q,
from Indiana Packet NTS Newsletter

AMSAT SPACE SYMPOSIUM SUCCESSFUL

Thanks to the excellent planning and execution of the Atlanta Radio Club, the sixth annual AMSAT Space Symposium was a great success! With over 130 in attendance representing 11 countries, AMSAT members had a chance to enjoy 19 papers covering a wide range of topics which are of current interest to the AMSAT satellite user community. Papers dealing with the polar SKITREK expedition, Microsats, Amateur Radio balloon experiments, weather satellites and the use of OSCARs in education were presented throughout the day. The following is a brief summary of the major aspects of the symposium which was held in Atlanta on November 11-12.

The major event of the symposium occurred when Leo Labutin, UA3CR, and Byron Lindsey, W4BIW, each made contact with U2MIR from the parking lot of the Airport Marriott Hotel with Musa Manorov operating the Mir 2-meter FM station. Sitting in Byron's station wagon with a one-element home-brew loop antenna being pointed manually by Martin Davidoff, K2UBC, Leo was able to make a contact with U2MIR. Byron's mobile station included a ICOM 2AT driving a 30-watt amplifier. Although the reception was marginal, Leo and Byron were each able to make a contact. The cosmonauts sent their greetings to all those who were attending the symposium. Approximately 60 AMSAT members were standing around the station wagon watching and listening. This was the first time an orbiting Soviet cosmonaut had made contact with a US Amateur Radio station.

At the banquet on Saturday night, keynote speaker Geoffrey Perry of the Kettering Group presented an informative and humorous discussion on some of his most interesting experiences in "satellite sleuthing." Leo spoke about humorous experiences with the skiers of the polar SKITREK expedition. Also, Leo explained how the cosmonauts were able to smuggle the Yaesu FT-290 aboard Mir in a cake box. He also mentioned that there is an American-Soviet SKITREK expedition being planned for the Antarctic next year. Leo recognized Rich Ensign, N8IWJ, for his many efforts related to the Skitrek and presented Rich with a copy of a book (in Russian) about a previous polar expedition.

On Sunday, the day after the symposium, Leo Labutin, UA3CR, became UA3CR/W4 as a result of passing the Amateur Extra exam administered to him by two Volunteer Examiners from Georgia Tech. Leo mentioned that his biggest problem was understanding the FCC regulations, but after studying the night before, he had no problem passing all of the exam elements from Novice to Extra class and had no problem with the Morse Code and theory parts of the exam.

While many technical papers were being delivered, there was a considerable number of developments made in the education area including an agreement with UA3CR to create an Antarctic SKITREK teachers' guide, establishment of AMSAT Space Educations Materials Centers in each country with an AMSAT organization, activation of the AMSAT Educations Materials Working Group and the establishment of the mechanism by which children worldwide can submit "messages of peace" to be spoken by the Project Dove Brazilian Microsat.

The main contributors to these educational efforts were made by Rich Ensign, N8IWJ, Hans van de Groenendaal, ZS6AKV, and Junior de Castro, PY2BJO.

The following awards were presented for outstanding service to AMSAT-NA: technical awards for their work on Microsats: Tom Clark, W3IWI, Dick Jansson, WD4FAB, Lyle Johnson, WA7GXD, and Matjaz Vidmar, YT3MV; recognition for their efforts in making the 1987 AMSAT-NA Space Symposium in Detroit a success: Larry Koziel, K8MU, and Steve Culp, K8QKY; recognition of his innovative efforts on the Space Education Net (SEN): K.O. Learner, K9PVW; recognition of his efforts in supporting Skitrek: Rich Ensign, N8IWJ; recognition of his tireless efforts in planning, coordinating and hosting the 1988 AMSAT-NA Space Symposium: Byron Lindsey, W4BIW; for outstanding service to AMSAT-NA in field operations: Regional Coordinators Jack Crabtree, AAØP, and Keith Pugh, W5IU, Area Coordinators Keith Berglund, WB5ZDP, John Clowe, W4ZPG, David Miracle, KA4UFM, and Dave Cowdin, WDØHHU; for his outstanding service and support to AMSAT-NA during the Dayton HamVentions: Bob Rogers, W8JLE.

A new AMSAT board of directors was elected consisting of Tom Clark, W3IWI, Vern Riportella, WA2LQQ, Phil Karn, KA9Q, and Andy MacAllister, WA5ZIB. First Alternate is John Henry, VE2VQ, and Second Alternate is Doug Loughmiller, KO5I.

The board of directors selected the following officers for AMSAT: Chairman Jan King, W3GEY, President Doug Loughmiller, KO5I, Executive Vice President John Champa, K8OCL, Vice President of Engineering Jan King, W3GEY, Vice President of Operations Courtney Duncan, N5BF, Treasurer Art Feller, KB4ZJ, and AMSAT Corporation Secretary Martha Saragovitz.

AMSAT officers appointed by newly elected President KO5I and approved by the board of directors were Vice President of User Operations Andy MacAllister, WA5ZIB, Vice President of Field Operations Jack Crabtree, AAØP, Vice President of Manned Space Projects Bill Tynan, W3XO, and Vice President of Special Programs Ray Soifer, W2RS.

Major items voted on and approved by the board of directors included the Weber State College statement-of-work for the Phase-IV mock-up model and engineering analysis, the changes in AMSAT-NA publications and the appointment of Joe Kasser, G3ZCZ/W3, as editor of a new AMSAT-NA publication, a revision of AMSAT-NA by-laws and a proposal by Dr. Alberto Zagni, I2KBD, of AMSAT-Italy and Amateur Radio Association of Italy for building a Microsat Satellite with AMSAT-NA.

From the standpoint of different and exciting subjects discussed, this AMSAT-NA Symposium was a "first" in itself.

from AMSAT-NA News Service

HAPN Modem Installation in the Pac-Comm Tiny TNC-2

The HAPN-T 4800-baud modem, which is available from the Hamilton and Area Packet Network (HAPN), is designed for the TAPR TNC 2 and its clones. I had a Pac-Comm Tiny TNC-2 which was to be used for a NET/ROM host on a backbone node. This TNC is quite a bit smaller than the typical TNC 2 and I wondered if I could squeeze the HAPN modem in the TNC or would I have to mount it externally. Happily, I was able to mount it inside according to the following directions.

Build the modem per HAPN instructions except leave out jumpers J100, J101 and J105. Determine which jumpers will be required for your installation and solder wire jumpers as needed. In my installation, the modem was to be dedicated to 4800 baud, so I also left out the MC14551 switching IC, U1, and then jumpered pin 1 to pin 14 and pin 5 to pin 10 of the U1 socket.

Next install the 20-pin modem disconnect header at the place provided for on the TNC, but only cut the trace between pins 17 and 18. No others have to be cut. The modem can now be placed on the header connector and will fit nicely if placed towards the front of the TNC.

To interface with the radio, use the conventional 5-pin, 180-degree DIN connector. Using a 5-pin female connector, prepare a set of 4 wires, each approximately 6-inches long attached to pins 1, 2, 3 and 4. This forms a free-hanging connector off the back of the TNC. Connect pin 1 of the 5-pin connector to pin 5 of J103 of the HAPN-T modem. Next, connect pin 2 of the 5-pin connector to pin 2 of J103, pin 3 of the 5-pin connector to the cathode of D9 of the TNC (this is the TX PTT lead), pin 4 of the 5-pin DIN to pin 4 of J103 and, to get the carrier detect from the modem to the TNC, pull the shorting jumper off JPD of the TNC and connect a wire jumper from pin 5 of the modem's J102 to the center pin of the TNC's JPD. One last connection for +12 V dc has to be made from the location provided on the modem to the cathode of the TNC's D6.

This is all that is necessary for fitting these two units together. Now, adjust the modem per HAPN's instructions and make sure to set the radio baud rates properly (in this case for 4800 bauds). (I did not worry about switching between 1200 and 4800 bauds in this modification, however, looking at the diagrams, it can be done, but with some difficulty as Pac-Comm uses pin 16 of the modem disconnect header for a ground.)

The end result is a reasonably priced, NET/ROM-compatible, 4800-baud, TNC/switch in a small package.

from Tom Bosscher, WA8URE @ WA8URE.MI or @ 49508

GATEWAY CONTRIBUTIONS

Submissions for publication in Gateway are welcome. You may submit material via the US mail to:

Gateway
Stan Horzepa, WA1LOU
75 Kreger Drive
Wolcott, CT 06716-2702

or electronically, via CompuServe to user ID 70645,247.

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Stan Horzepa, WA1LOU
Editor

Larry E. Price, W4RA
President

David Sumner, K1ZZ
Executive Vice President

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